REMARKS/ARGUMENTS

The Office Action mailed July 21, 2005 has been carefully considered. Reconsideration in view of the following remarks is respectfully requested.

Claims 1-2, 4, 8, 14-15, 17, 21, 27, 29, and 31 have been amended to further particularly point out and distinctly claim subject matter regarded as the invention. Support for these changes may be found in the Specification, paragraph [0041] - [0075]. The text of claims 3, 5-7, 16, 18-20, 32 and 33 is unchanged, but their meaning is changed because they depend from amended claims.

Claims 9-13, 22-26, 28 and 30 have been canceled, without prejudice or disclaimer of the subject matter contained therein.

With this amendment it is respectfully submitted the claims satisfy the statutory requirements.

The 35 U.S.C. § 102 Rejection

Claims 1, 3, 5-8, 10, 12-14, 16, 18-20, 21, 23-27, 29, 31-34, 36, 38 and 39 were rejected under 35 U.S.C. § 102(e) as being allegedly anticipated by Bhattacharya[1] This rejection is respectfully traversed. Of the rejected claims, claims 1, 8, 14, 21, 27, 29, and 31 have been amended. In light of these amendments, Applicant maintains that the original rejection is moot.

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[1] U.S. Patent No. 6,587,466

A description of the differences between the claimed invention and the prior art will be provided in more detail below.

The 35 U.S.C. § 103 Rejection

Claims 2, 4, 9, 11, 15, 17, 22, 28, 30, 35 and 37 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Bhattacharya in view of Lyons[2]. This rejection is respectfully traversed.

Of the rejected claims, claims 2, 4, 15, and 17 have been amended. In light of these amendments, Applicant maintains that the original rejection is moot. A description of the differences between the claimed invention and the prior art will be provided in more detail below.

The Claimed Invention vs. The Cited Prior Art

Claims 1-2, 4, 8, 14-15, 17, 21, 27, 29, and 31 have been amended to reflect that the claimed invention comprises multiple software modules. These amendments find support in the Specification, paragraph [0041] - [0075]. As stated in paragraph [0041], These modules run in a "pipelined" environment where various techniques are applied to an incoming packet in each module, before forwarding the packet to another module. Traditionally, such modules were implemented using a "shared memory" architecture, where the modules would be connected to a common memory. Each module then acted upon the packet stored in the common memory. However, the claimed invention utilized a specialized packet extension to eliminate the shared

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[2] U.S. Patent No. 6,075,798

memory. As stated in paragraph [0041], "[s]ince the communication between the modules takes place using the packet extension, no shared memory architecture is required between the processing modules allowing a very low latency memory access as well as distributed processing."

Neither Bhattacharya nor Lyons nor their combination teach or suggest this aspect of the claimed invention. As to Bhattacharya, as the Office Action states "Bhattacharya...does not teach, appending an extension to the packet." As to Lyons, Lyons teaches using an extended header in ATM packets. This extended header comprises an additional octet appended to the traditional header. *See Abstract.* This header, however, is only applied for 2-point communications, namely, the extended header is applied prior to sending the packet over the network by a transmitter. Then the packet is received by a receiver and the extended header is read and the packet handled accordingly. There is nothing in Lyons to suggest the subsequent updating of a header with additional information. In other words, in Lyons, once the extended header is added to a particular packet, the extended header is either read or deleted, but never modified for that particular packet. Lyons, in fact, would not have any reason to update the extended header because it is not in a pipeline environment, it is in a standard networking environment. As is typical in ATM and other networks, this header is simply read on the receiving end and then stripped off at a later time. If the payload then needs to be retransmitted with different header information, a brand new header is utilized.

As such, neither Bhattacharya nor Lyons nor their combination teach or suggest the claimed invention.

In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.
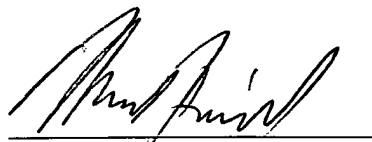
Conclusion

It is believed that this Amendment places the above-identified patent application into condition for allowance. Early favorable consideration of this Amendment is earnestly solicited.

If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case. Please charge any additional required fee or credit any overpayment not otherwise paid or credited to our deposit account No. 50-1698.

Respectfully submitted,

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Dated: 1/20/06

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